Kevin L. Kelly

FY 1999

Reclamation research projects often require new and unique analytical chemistry methodologies. However, research projects typically do not have the resources to initiate and develop these new technologies.

To develop new analytical chemistry methodologies in support of individual Reclamation research projects.

During FY 1999, we developed 11 new analytical chemistry capabilities in support of various research projects. Areas of analytical chemistry development include formation kinetics of disinfection byproducts, analyses of unique inorganic and organic compounds in reservoir studies and waste water effluents, large volume water sampling, and aggregate organic analyses. Analytical chemistry methodologies for over 75 target organic and inorganic compounds were developed. Among the chemical parameters that have been analyzed for are organotins, triazines, organophosphorous herbicides, organochlorine pesticides, ammonium perchlorate, pharmaceuticals, aggregate organic and inorganic carbon, and aggregate chlorinated organic carbon. In addition to research funding, we have also received $40,000 of matching contributions and over $60,000 of new instrumentation in support of these developments.

Groups which have benefitted from these new methodologies during FY 1999 include the Reclamation Technical Service Center (Ecological Research and Investigations and Water Treatment Engineering and Treatment), Reclamation Yuma Area Office, Southern Nevada Water Authority, National Park Service, and Clark County Sanitation District.
Publications and conference presentations have been given by the individual projects that were supported by these new methodologies. They are listed elsewhere in this FY 1999 Research and Technology Transfer Activities Annual Report.